
UTAH DEPARTMENT OF TRANSPORTATION

TECHNICAL BULLETIN MT-05.02

January 19, 2005

Cement & Fly Ash

Microscopic photographs of fly ash (left) and portland cement (right).

Pre-Qualification: Cement and Fly Ash/Pozzalon, used on UDOT projects are required to be from pre-qualified suppliers. Suppliers are qualified through the Cement Quality Management Plan, and the Fly Ash and Pozzalon Quality Management Plan. These plans are managed and maintained by UDOT Central Materials Lab. A listing of qualified suppliers can be found at:

<http://www.dot.state.ut.us/index.php/m=c/tid=417>

Acceptance Procedures: Each pre-qualified cement and fly ash/Pozzalon supplier is required to send a minimum of two split samples per month for each cement or fly ash type they are pre-qualified to produce. One part of the split sample is sent to UDOT Central Materials Lab for chemical and physical testing. The manufacturer tests the other half of the split and presents chemical and physical results to the Central Materials Lab. Once each month UDOT Central lab also obtains from each pre-qualified source and type, a cement and/or fly ash sample that is tested for verification. As long as the chemical and physical test results fall within the testing limits for the split samples and random verification samples, the producer remains qualified for each type.

Cement from a qualified manufacturer delivered to the project site or concrete producing plant, may be sampled by a representative of UDOT anytime a material is suspect. The procedures for taking project samples need to be in accordance with ASTM C-183 to insure that the material sampled represents the material shipped. When the test results of any two consecutive samples of a particular type exceed the limit for any applicable specification property, an increased sampling interval as determined by UDOT Central Materials Lab can and/or will occur.

Failure of manufacture to submit split samples and/or not meeting chemical and physical properties will result in removal as a supplier for each type that does not meet the requirements.

FURTHER INFORMATION

UDOT CONTACTS

Tim Biel, Engineer for Materials, (801) 965-4859, tbiel@utah.gov

Bill Lawrence, UDOT Concrete Engineer, (801) 965-4560, Billlawrence@utah.gov

Sara Carlock, UDOT Chemist, (801) 965-4298, Saracarlock@utah.gov

Larry Ivie, UDOT Materials Tech, (801) 965-4299, LarryIvie@utah.gov
